

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A reproducing apparatus comprising:

a reproducing unit that extracts recorded video signals from a recording medium in which said video signals have same contents but are compressed in a plurality of different bit rates and record management information that denotes a mutual association between said video signals that have the same contents but are compressed in a plurality of different bit rates;

a decoding unit that decodes any of said video signals extracted from said recording medium; and

a recording unit that records, in correspondence to said record management information, reproduction management information including ~~reproduction interruption information that denotes reproduction-interruption information for~~ defining a point of interruption in time of time when a user interrupts a reproduction of said video signals from said recording medium,

wherein ~~said decoding unit decodes said video signals~~ are decoded according to a selected bit rate of said plurality of different bit rates from said point of interruption in time.

2. (Previously Presented) The reproducing apparatus according to claim 1, wherein said recording unit records said reproduction management information on said recording medium.

3. (Previously Presented) The reproducing apparatus according to claim 1, further comprising a built-in flash memory,

wherein said reproduction management information is recorded on said flash memory.

4. (Currently Amended) The reproducing apparatus according to claim 3, wherein said reproducing unit further extracts said reproduction management information from said flash memory, and based on said record management information and said reproduction management information, extracts, from said recording medium, said video signals after said video signals corresponding to said ~~reproduction-interruption-reproduction-interruption~~ information included in said reproduction management information.

5. (Currently Amended) The reproducing apparatus according to any one of claims 1 to 4, wherein said ~~reproduction-interruption-reproduction-interruption~~ information concerns elapsed time from start of reproduction of said video signal.

6. (Previously Presented) The reproducing apparatus according to claim 3, wherein said recording unit further records, in correspondence to said record management information and said reproduction management information, identification information of said recording medium on said flash memory.

7. (Currently Amended) The reproducing apparatus according to claim 6, wherein said reproducing unit further extracts said record management information, said reproduction management information, and said identification information of said recording medium,

any of said video signals extracted from said recording medium is suitable for said reproducing unit and/or said decoding unit, and

said reproducing unit, based on said record management information, said reproduction management information, and said identification information of said recording medium, further extracts, from said recording medium, said video signals after said video signals corresponding to said ~~reproduction-interruption-reproduction-interruption~~ information included in said reproduction management information.

8. (Previously Presented) The reproducing apparatus according to claim 1, wherein said video signals are compressed in a plurality of different conditions including any one of different numbers of pixels and different compression methods.

9. (Previously Presented) The reproducing apparatus according to claim 1, wherein said video signals that have the same contents but are compressed in a plurality of different bit rates are recorded on said recording medium so that each of said video signals can be continuously reproduced.

10. (Previously Presented) The reproducing apparatus according to claim 1, wherein said video signals that have the same contents but are compressed in a plurality of different bit rates are recorded respectively in continuous data areas, each of which has size that is equal to or larger than a predetermined size.

11. (Previously Presented) The reproducing apparatus according to claim 10,

wherein said recording medium is an optical disc, a magneto-optical disc, or a magnetic disc,

said reproducing unit has a head for reading a video signal from said recording medium, and

said predetermined size is expressed by the following equation:

(equation 1)

$$Vo \times Tj \times Vr / (Vr - Vo)$$

(Vo: data transfer rate to said decoding unit (Mbps), Tj: maximum seek time of said head (second), Vr: data-reading rate of each of said video signals from said recording medium by said head (Mbps)).

12. (Previously Presented) The reproducing apparatus according to claim 1,

wherein said video signals that have the same contents but are compressed in a plurality of different bit rates are recorded respectively in continuous data areas, each of which has size that is equal to or larger than a predetermined size, and

said continuous data areas are recorded in a form of being repeatedly

alternately arranged.

13. (Previously Presented) The reproducing apparatus according to claim 10 or 12, wherein said video signals compressed in a plurality of different bit rates that are recorded in said continuous data areas, each of which has size that is equal to or larger than said predetermined size, have same reproduction time.

14. (Previously Presented) The reproducing apparatus according to claim 12, wherein said decoding unit further decodes said video signals compressed in a plurality of different bit rates that are extracted from said recording medium.

15. (Previously Presented) The reproducing apparatus according to claim 8, wherein said different compression methods are MPEG2 and MPEG4, respectively.

16. (Previously Presented) A recording apparatus, comprising:

a recording unit that records, on a recording medium, video signals that have same contents but are compressed in a plurality of different bit rates, and record management information that denotes a mutual association between said video signals that have the same contents but are compressed in a plurality of different bit rates;

a reproducing unit that extracts a video signal recorded on said recording medium; and

a decoding unit that decodes said video signal extracted from said recording medium,

wherein said recording unit records said video signals that have the same contents but are compressed in a plurality of different bit rates, respectively, in continuous data areas, each of which has size that is equal to or larger than a predetermined size, and records said continuous data areas on said recording medium in a form of being repeatedly alternately arranged.

17. (Previously Presented) The recording apparatus according to claim 16,

wherein said recording medium is an optical disc, a magneto-optical disc, or a

magnetic disc,

said reproducing unit has a head for reading a video signal from said recording medium, and

said predetermined size is expressed by the following equation:

(equation 1)

$$V_o \times T_j \times V_r / (V_r - V_o)$$

(V_o : data transfer rate to said decoding unit (Mbps), T_j : maximum seek time of said head (second), V_r : data-reading rate of each of said video signals from said recording medium by said head (Mbps)).

18.-19. (Cancelled).

20. (Currently Amended) A reproducing method, comprising the steps of:

extracting recorded video signals from a recording medium in which said video signals have same contents but are compressed in a plurality of different bit rates and record management information that denotes a mutual association between said video signals that have the same contents but are compressed in a plurality of different bit rates;

decoding any of said video signals extracted from said recording medium; and

recording, in correspondence to said record management information, reproduction management information including ~~reproduction—interruption~~ information that denotes ~~reproduction-interruption information for defining~~ a point of interruption in time ~~of a time when a user interrupts a reproduction of said video~~ signals from said recording medium,

wherein said video signals are decoded according to ~~any to a selected bit rate~~ of said plurality of different bit rates from said point of interruption in time.

21. (Currently Amended) The reproducing method according to claim 20,

wherein the step of recording, in correspondence to said record management information, said reproduction management information means a step of recording, in correspondence to said record management information, said reproduction management information on a flash memory,

the reproducing method further comprising the steps of:

extracting said reproduction management information from said flash memory, and

based on said record management information and said reproduction management information, extracting, from said recording medium, said video signals after said video signals corresponding to said ~~reproduction-interruption-reproduction-interruption~~ information included in said reproduction management information.

22. (Currently Amended) A computer readable medium, including a program that causes a computer to perform the steps of, ~~extracting from said recording medium, any of said video signals, decoding any of said video signals extracted from said recording medium, and recording, in correspondence to said record management information, said reproduction management information, of the reproducing apparatus~~ decoding and recording according to claim 20.

23. (Previously Presented) A computer readable medium, including a program that causes a computer to perform the steps of recording, extracting and decoding according to claim 26.

24. (Cancelled).

25. (Currently Amended) A computer readable recording medium, including a data structure, wherein video signals having same contents but are compressed in a plurality of different bit rates and are independently recorded on said recording medium, said data structure being capable of recording record management information that denotes a mutual association between said video signals that have the same contents but are compressed in a plurality of different bit rates, and reproduction management information including ~~reproduction-interruption information that denotes reproduction-interruption information for defining~~ a point of

interruption in ~~time-of-time when a user interrupts a~~ reproduction of said video signals from said recording medium, in correspondence to said record management information.

26. (Currently Amended) A recording method, comprising the steps of:

{a}—recording, on a recording medium, video signals that have same contents but are compressed in a plurality of different bit rates, and record management information that denotes a mutual association between said video signals that have the same contents but are compressed in a plurality of different bit rates;

{b}—extracting a video signal recorded on said recording medium; and

{e}—decoding said video signal extracted ~~in step (b), and from said recording medium,~~

wherein said video signals ~~in step (a)~~ that have the same contents but are compressed in a plurality of different bit rates, respectively, are recorded in continuous data areas, each of which has size that is equal to or larger than a predetermined size, and said continuous data areas are recorded on said recording medium in a form of being repeatedly alternately arranged.

27. (Cancelled).